

10532,523

and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 16:20:44 ON 07 JUL 2009

=> fil reg

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SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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0.22

FILE 'REGISTRY' ENTERED AT 16:21:00 ON 07 JUL 2009

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STRUCTURE FILE UPDATES: 6 JUL 2009 HIGHEST RN 1160908-15-5

DICTIONARY FILE UPDATES: 6 JUL 2009 HIGHEST RN 1160908-15-5

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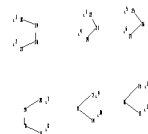
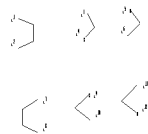
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<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\STNEXP\Queries\532523.str



chain nodes :

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36  
37

ring nodes :

```

1  2  3  4  5  6  7  8  9 10 12 15 51 53
chain bonds :
15-16 15-17 18-19 19-20 20-21 22-23 23-24 25-26 26-27 28-29 29-30 30-31
32-33 33-34 35-36 36-37
ring bonds :
1-2 1-5 1-15 1-51 2-3 2-15 3-4 3-12 3-15 4-5 4-15 5-15 5-51 6-7 6-10
6-15 7-8 7-15 7-53 8-9 8-15 8-53 9-10 9-12 9-15 10-15
exact/norm bonds :
1-2 1-5 1-15 1-51 2-3 2-15 3-4 3-12 3-15 4-5 4-15 5-15 5-51 6-7 6-10
6-15 7-8 7-15 7-53 8-9 8-15 8-53 9-10 9-12 9-15 10-15 15-16 15-17
18-19 19-20 20-21 22-23 23-24 25-26 26-27 28-29 29-30 30-31 32-33 33-34
35-36 36-37

```

G1:C,Si,Ge,Sn

G2:Ce,Cr,Eu,Hf,La,Mo,Nb,Nd,Pm,Pr,Sc,Sm,Ta,Ti,V,W,Y,Zr

G3:[\*1-\*2],[\*3-\*4],[\*5-\*6]

G4:[\*7-\*8],[\*9-\*10],[\*11-\*12]

Match level :

```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
12:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS
30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS
51:Atom 53:Atom

```

L1 STRUCTURE UPLOADED

=> d his

(FILE 'HOME' ENTERED AT 16:20:44 ON 07 JUL 2009)

FILE 'REGISTRY' ENTERED AT 16:21:00 ON 07 JUL 2009

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 16:21:28 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 791 TO ITERATE

100.0% PROCESSED 791 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 14133 TO 17507

PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 16:21:40 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 16221 TO ITERATE

100.0% PROCESSED 16221 ITERATIONS

8 ANSWERS

SEARCH TIME: 00.00.02

L3 8 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

185.88

186.10

FILE 'CAPLUS' ENTERED AT 16:21:47 ON 07 JUL 2009

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FILE COVERS 1907 - 7 Jul 2009 VOL 151 ISS 2

FILE LAST UPDATED: 6 Jul 2009 (20090706/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2009

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3/prep

7 L3

4805337 PREP/RL

L4

5 L3/PREP

(L3 (L) PREP/RL)

=> d 1-5 bib abs

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2004:393717 CAPLUS

DN 141:207326

TI Synthesis of unsymmetrical ansa-fluorenyl metallocenes

AU Siedle, A. R.; Newmark, Richard A.; Duerr, Brook F.; Leung, Peter C.

CS Corporate Research Laboratories, 3M, St. Paul, MN, 55144-1000, USA

SO Journal of Molecular Catalysis A: Chemical (2004), 214(2), 187-198

CODEN: JMCCF2; ISSN: 1381-1169

PB Elsevier Science B.V.

DT Journal

LA English

OS CASREACT 141:207326

AB General syntheses of unsym. ansa-fluorenyl (flu)-containing ligands of the type flu-bridge-flu' (bridge: C<sub>2</sub>H<sub>4</sub>, CH<sub>2</sub>-SiMe<sub>2</sub>, SiMe<sub>2</sub>, SiPh<sub>2</sub>) and of the corresponding [flu-bridge-flu']ZrCl<sub>2</sub> metallocenes are described. Substituent effects in [2,7-R<sub>2</sub>-flu-C<sub>2</sub>H<sub>4</sub>-flu]ZrCl<sub>2</sub> (R: H, t-Bu, F, Cl) on rates of 1-octene polymerization and crystal structure of [(2,7-t-Bu<sub>2</sub>-flu)2C<sub>2</sub>H<sub>4</sub>]ZrCl<sub>2</sub> are described.

RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2003:435278 CAPLUS

DN 138:402396

TI Tri-bound bridged metallocene catalysts for olefin polymerization

IN Holtcamp, Matthew W.

PA USA

SO U.S. Pat. Appl. Publ., 18 pp., Cont.-in-part of U.S. Ser. No. 747,821.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20030104928	A1	20030605	US 2002-304032	20021125
	US 20020082369	A1	20020627	US 2000-747821	20001222
	US 6632770	B2	20031014		
	WO 2004047989	A1	20040610	WO 2003-US32528	20031015
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
PRAI	US 2000-747821	A2	20001222		
	US 2002-304032	A	20021125		

OS MARPAT 138:402396

AB The title catalyst has a general formula CpA(A)CpBMX<sub>n</sub>, where M is a Group 3-12 metal, CpA and CpB are independently selected from (un)substituted cyclopentadienyl or indenyl ligands, X is an anion, such as halide, n = 0-3, (A) is a trivalent bridging group comprising a Group 14 element A and ≥3 linkages: ≥2 linkages between A and CpA and one linkage between A and CpB, and the linkages are selected from covalent bonds, C1-12 hydrocarbylenes and C1-12 heteroatom-containing hydrocarbylenes.

L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:810922 CAPLUS

DN 138:24805

TI A Silylene-Bridged (Isodicyclopentadienyl)(Fluorenyl) Complex of Zirconium for Homogeneous Olefin Polymerization

AU Gentil, Sebastien; Dietz, Mirko; Pirio, Nadine; Meunier, Philippe; Gallucci, Judith C.; Gallou, Fabrice; Paquette, Leo A.

CS Laboratoire de Synthèse et Electrosynthèse Organometalliques Associé au CNRS UMR 5632, Université de Bourgogne Faculté des Sciences Gabriel, Dijon, 21000, Fr.

SO Organometallics (2002), 21(24), 5162-5166

CODEN: ORGND7; ISSN: 0276-7333

PB American Chemical Society

DT Journal

LA English

OS CASREACT 138:24805

AB The synthesis and characterization of the new dimethylsilylene(isodicyclopentadienyl)(fluorenyl)zirconium dichloride (5)

were performed. This complex was characterized by <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy and its solid-state mol. structure was determined After activation by Me alumoxane, 5 is shown to initiate the polymerization of ethylene

and propylene. In the latter case, s-PP (syndiotactic polypropylene) is produced. Quite unusual for a silylene-bridged Zr complex, good syndiotacticity was observed for propylene polymerization

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN  
AN 1999:282251 CAPLUS  
DN 130:313021  
TI Elastic polypropylenes and metallocene catalysts for their manufacture  
IN Siedle, Allen R.; Misemer, David K.; Kolpe, Vasant V.; Duerr, Brook F.  
PA Minnesota Mining and Manufacturing Company, USA  
SO PCT Int. Appl., 69 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9920664	A2	19990429	WO 1998-US22028	19981019
	WO 9920664	A3	19991118		
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6265512	B1	20010724	US 1997-956880	19971023
	AU 9898081	A	19990510	AU 1998-98081	19981019
	EP 1023339	A2	20000802	EP 1998-952364	19981019
	EP 1023339	B1	20090304		
	R:	DE, FR, GB, IT			
	JP 2001520283	T	20011030	JP 2000-516999	19981019
	US 6323151	B1	20011127	US 1999-391541	19990908
	KR 808520	B1	20080229	KR 2000-704376	20000422
	US 6429274	B1	20020806	US 2000-654621	20000905
	US 20010044515	A1	20011122	US 2001-827222	20010405
	US 6448358	B2	20020910		
PRAI	US 1997-956880	A	19971023		
	WO 1998-US22028	W	19981019		

OS MARPAT 130:313021

AB A propylene polymeric composition with elastic character and soluble in  $\geq 1$  nonpolar organic solvent selected from toluene, xylene, heptane, and hexane, comprises 3-45% homotactic sequences each having only r or m diads, all of the homotactic sequences have a helical length 20-150 Å, and at 55-97% of the sum of homotactic sequences of  $< 20$  Å in helical length, each homotactic sequence having only r or m diads and having  $< 10$  repeat units with mmmm pentads 0-35%, and heterotactic sequences having r and m diads of unequal number, the polymer having a weight-average mol. weight ( $M_w$ )  $\leq 70,000$ .

Metallocene catalysts of low symmetry and described as to their shape can be predictive of the stereoregular nature of the polypropylene, i.e. highly isotactic or atactic or intermediate in stereoregularity. Propylene polymerized in the presence of (2-methylbenzidine-C<sub>2</sub>H<sub>4</sub>-flu)ZrCl<sub>2</sub> (flu = fluorenyl) to give a product having tensile strength (1000% strain) MPa 0.8, elongation 1000%, yield pt. 0.34 MPa, tensile modulus 9.9 MPa,

and shear viscosity (10 s-1) 3000 Pa s.

RE.CNT 6        THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4    ANSWER 5 OF 5    CAPLUS    COPYRIGHT 2009 ACS on STN

AN    1993:428284    CAPLUS

DN    119:28284

OREF 119:5245a,5248a

TI    ansa-Metallocene derivatives. 27. Chiral zirconocene complexes with two dimethylsilylene bridges

AU    Mengele, Winfried; Diebold, Josef; Troll, Carsten; Roell, Werner; Brintzinger, Hans Herbert

CS    Fak. Chem., Univ. Konstanz, Konstanz, D-7750, Germany

SO    Organometallics (1993), 12(5), 1931-5

CODEN: ORGND7; ISSN: 0276-7333

DT    Journal

LA    English

AB    Doubly bridged zirconocene derivs. with C2 sym. disposed substituents, (Me2Si)2(3,4-dimethyl-1,2-cyclopentadienediyl)2ZrCl2 (4A) and (Me2Si)2(4,5,6,7-tetrahydro-1,2-indenediyl)2ZrCl2 (4B) were synthesized by reactions of the corresponding ligand dilithium salts with ZrCl4 in toluene; the racemic isomers were obtained by fractionated crystallization of the diastereomeric product mixts. Both complexes show the expected C2-axial symmetry. In combination with methylalumoxane, 4A and 4B are slowly converted to catalysts for the polymerization of propene, which yield polymers with low and medium isotacticities, resp. Control expts. indicate that conversion of these complexes to active catalysts involves degradation of their strained ligand frameworks; intact 4A and 4B do not appear to give rise to catalytic activity.

=> s 13

L5                7 L3

=> s 15 not 14

L6                2 L5 NOT L4

=> d 1-2 bib abs

L6    ANSWER 1 OF 2    CAPLUS    COPYRIGHT 2009 ACS on STN

AN    2002:943782    CAPLUS

DN    138:255545

TI    A measure of metallocene catalyst shape asymmetry

AU    Siedle, A. R.; Theissen, Kristin M.; Stevens, John

CS    Corporate Research Laboratories, 3M, St. Paul, MN, 55144-1000, USA

SO    Journal of Molecular Catalysis A: Chemical (2003), 191(2), 167-175

CODEN: JMCCF2; ISSN: 1381-1169

PB    Elsevier Science B.V.

DT    Journal

LA    English

AB    An asymmetry parameter (AP) is used as a continuous, pos., metrical shape descriptor and applied to ansa-bridged metallocene catalysts of the type [(ligand 1)-bridge-(ligand 2)]MX2 where ligands 1 and 2 are variously substituted cyclopentadienyl, indenyl or fluorenyl groups connected by, e.g. SiMe2 or C2H4; and where M is Ti, Zr or Hf and X, a halogen or alkyl group. It is the ratio of the van der Waals surface area of the larger ligand divided by that of the smaller. A series of syndioregulating catalysts was used to polymerize propylene. As the catalyst AP increases, the polypropylenes produced have successively higher syndiotacticity. A simple, arithmetic formula for calculating APs of new catalysts is presented.

RE.CNT 46        THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN  
 AN 2002:488261 CAPLUS  
 DN 137:47618  
 TI Activator for metallocene catalyst system and its use in a polymerization process  
 IN Holtcamp, Matthew W.  
 PA Univation Technologies, LLC, USA  
 SO U.S. Pat. Appl. Publ., 16 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20020082369	A1	20020627	US 2000-747821	20001222
	US 6632770	B2	20031014		
	CA 2432722	A1	20020704	CA 2001-2432722	20011127
	WO 2002051884	A2	20020704	WO 2001-US44434	20011127
	WO 2002051884	A3	20030912		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002236494	A1	20020708	AU 2002-236494	20011127
	EP 1358227	A2	20031105	EP 2001-986026	20011127
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2001016790	A	20040615	BR 2001-16790	20011127
	JP 2004521165	T	20040715	JP 2002-552974	20011127
	CN 1630667	A	20050622	CN 2001-822450	20011127
	US 20030104928	A1	20030605	US 2002-304032	20021125
PRAI	US 2000-747821	A	20001222		
	WO 2001-US44434	W	20011127		

OS MARPAT 137:47618

AB A catalyst system for the polymerization of olefin(s) comprises an activator composition having a siloxane moiety represented by:  
 $[LH] + [MQn] - O(SiR_2O)_x[MQn] - [LH] +$  or  $[LH] + [MQn] - O(SiR_2O)_xR$  wherein L is a neutral Lewis base;  $[LH] +$  is a Bronsted acid; n is 3 or 4; x is a pos. integer;  $[MQn] -$  is a non-coordinating anion; M is a Group 13 element; and each R is independently selected from the group consisting of a monoanionic ligand, hydrogen, an hydroxyl group, an alkyl, and combinations thereof. The invention also provides a new supported catalyst activator composition where the siloxane moiety reacts with an alkylaluminum bonded to a silica support. The invention also provides for methods of making the activator compns., polymerization catalyst systems including the activator compns. and processes for polymerizing olefin(s) utilizing same. The activator  
 $[(C_6H_5)(CH_3)_2NH]_2[[ (C_6F_5)_3BC_6F_4OSi(CH_3)_2OSi(CH_3)_2]_2-O-]$  was prepared and used with (1,3-BuMeCp)<sub>2</sub>ZrMe<sub>2</sub> in polymerization of ethylene and 1-hexene.

=>

---Logging off of STN---

=>  
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	26.24	212.34
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-5.74	-5.74

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